



Do I Refurbished my Espresso Machines, or Buy a New One? What you should know

If you are considering purchasing a refurbished commercial espresso machine or maybe thinking about refurbishing your own, there will be a few things you will want to consider before moving in this direction. At some point, the owner of any espresso machine will consider the replacement or refurbishment of their existing espresso equipment. If a machine is unreliable, or espresso consistency is being compromised, refurbishment of a machine is a good way to save money. In this article, we discuss the refurbishing process and what you should know before choosing refurbishment over purchasing new equipment.

The Espresso Machine Refurbishing Process

An espresso machine usually needs to be refurbished for only two reasons, the machine contains **excessive minerals**, or it is **old**. If your machine is holding excessive minerals/scale, you are not alone.

Scale plaques more espresso machines than any other fault or mishap. Scale undermines heating stability by insulating heat exchangers and elements, and clog tubing and valves, which will prevent proper brewing and steaming.

Completely Descaling An Espresso Machine

To completely Descale an espresso machine, boiler(s) and tubing must be removed from the frame of the espresso machine. A service technician will carefully dislodge and manually remove minerals from the boiler. We write 'carefully' because denting and marking the boiler invites minerals to adhere to these rough and porous areas in the future.



In some cases, a majority of the scale are removed manually but in other cases, the nature of the minerals may be resistant. The boiler and all tubing are soaked in an agent such as citric or phosphoric acid. The acid is left for a period of time, then removed and the boiler and tubing are flushed.

This process is repeated until all traces of scale have been removed. A final flushing process is completed and the boiler and tubing are secured back into the espresso machine casing.

If scale remain in the tubing, the tubing should be replaced.

It is very important that the process be completed and not terminated before all scale have been extracted.

For an average commercial espresso machine, the descaling process can take up to two weeks depending on the hardness of the minerals and the amount of build up.

The complete demineralization of an espresso machine is labour intensive and should be performed in a shop type environment.

Partial Scale Removal

There is also a practice of **partial scale removal** which simply means scale is carefully dislodged and removed manually through the boiler cap. The boiler and tubing are then flushed. During flushing, if the boiler has not been removed, the service technician must be careful not to damage nearby components.

Although a lot less labour intensive, minerals will remain and, at some point dislodge, finding their way into restrictors or valves.

Scale in tubing and valves cannot be removed by partial mineral removal

Purchasing a machine that has not gone through the complete descaling process and has a history of being exposed to hard water is not recommended. Even though the boiler and tubes might have been flushed there is still a chance that minerals can dislodge and get stuck in restrictors or valves causing major malfunctions.

After descaling, a comprehensive parts replacement should be completed. The following is a recommended list of espresso machine parts that should be replaced:

Refurbished Commercial Espresso Machine Parts that should be replaced:

- O-rings, gaskets and screens
- Brew Valve(s)
- Inlet Valve
- Pressure Stat
- Heating Element(s)
- Hot Water Valve(s)
- Pump

Additional services include the **rebuilding of all steam, expansion and check valves**. If the machine has a **thermostat** it should be replaced as well. Main boards and/or electronic boards should not be replaced unless inoperable. Group heads and portable filter holders are also optional.

The Right Service Company to Refurbish Your Espresso Machine

Whether you are purchasing a refurbished espresso machine or are an owner looking to refurbish your existing equipment, take the time to find the right company to give your business to. Understanding refurbishment and communicating what you expect will assist you when working with a sales or service company.

Documentation:

If you are purchasing a refurbished machine, request documentation detailing the refurbishment and a complete list of parts replaced or rebuilt. Was the machine de-mineralized? All sales and service companies will have this information available. If not, our advice is not to gamble your money and risk your business on the possibility that the machine is not sound or the company is not legitimate, which will be important when warranty issues come up; continue looking.

Estimate:

Before choosing a service provider, ask for a written estimate from at least two companies. The estimate should be for a complete refurbishment that details parts to be replaced and services to be completed. Also, ask for a limit on additional charges. Getting an estimate will let you know ahead of time what you will be purchasing, and help you avoid additional costs as well as a lot of miscommunication down the line. Consider electronics and group heads when evaluating your estimate. If they are not included, remember that they may need to be replaced at some point. Many service companies will provide a rental or complimentary espresso machine for your convenience so you will want the cost of removing and re-installing your equipment included in your estimate.

Warranty:

Refurbishments typically come with some type of warranty beyond thirty days. Be sure to ask specifically about the individual areas of the warranty such as labour, travel, and parts. Will they warranty repairs if minerals are found in the machine? If any electronics fail during the warranty period, will the warranty cover the labour and travel to install the new component(s)?

4 Important Considerations About Refurbished Espresso Machine

Anyone considering the purchase of a refurbished espresso machine or refurbishing a machine they currently own should reflect carefully on the following:

Equipment age:

If the machine is over ten years old, and obsolete, obtaining **discontinued parts** especially **electronics** may be difficult going forward. Is it worth investing in a machine that may not be repairable?

Budget:

Remember that electronics and group heads are not usually replaced in a refurbishment so it is important to keep in mind that they still may need to be replaced down the road. Also, if your machine is older, sometimes tearing down equipment can have a landslide effect on a machine's components. Many times working parts prior to a refurbishment become non-working once a refurbishment begins adding additional cost if not already detailed in your estimate.

Partial Refurbishment:

Trying to save money by just partially repairing and de-mineralizing a machine, in the end, may be the most expensive. Clearly, the problem with this practice is that minerals will remain in your boiler(s) as well as your tubing. At any time, these minerals can break free causing clogs, the very problem you may be dealing with now. Also, the machine will continue to hold used components that will inevitably need to be replaced causing more on-site repair and expense.

Price:

Does the price reflect the quality and condition of the machine? Surprisingly, not everyone thinks of refurbishment in the same way. Most consumers think *refurbishment* means a machine that will operate as if it were new, producing quality beverages, and not constantly needing service. The cost of a quality refurbished machine should cost close to half of what the same machine or similar would cost new. If the price is too low, find out the reason why. Maybe the machine was operating in an area where there are no minerals. This could reduce the price some. Limiting parts replaced could be another reason for a lower price. Good deals can be found but just be sure to weigh the savings with the cost of potential repair issues and service charges.